

PC-0040 US

<110> Preeti Lal
Jennifer Hillman

<120> DIAGNOSTIC MARKER FOR CANCERS

<130> PC-0040 US

<140> To Be Assigned

<141> Herewith

<160> 14

<170> PERL Program

<210> 1

<211> 340

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1573677CD1

<400> 1

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Ser	Pro	Pro	Thr	Asp	Ser	Ser	Val	Thr	Glu	Thr	Ile	Ile	Leu	Cys
				20					25					30
Thr	Met	Leu	Phe	Leu	Gly	Ser	Leu	Gly	Ala	Trp	Gly	Thr	Thr	Ser
				35					40					45
Ile	Ser	Thr	Gly	Ser	Ile	Phe	Ser	Leu	Lys	Thr	Leu	Arg	Ser	Gln
				50					55					60
His	Gly	Gly	Gln	Val	Gly	Leu	Lys	Val	Ser	Arg	Pro	Arg	Ala	Gln
				65					70					75
Pro	Leu	Pro	Ala	Gln	Pro	Pro	Ala	Leu	Ala	Gln	Pro	Gln	Tyr	Gln
				80					85					90
Ser	Pro	Gln	Gln	Pro	Pro	Gln	Thr	Arg	Trp	Val	Ala	Pro	Arg	Asn
				95					100					105
Arg	Asn	Ala	Ala	Phe	Gly	Gln	Ser	Gly	Gly	Ala	Gly	Ser	Asp	Ser
				110					115					120
Asn	Ser	Pro	Gly	Asn	Val	Gln	Pro	Asn	Ser	Ala	Pro	Ser	Val	Glu
				125					130					135
Ser	His	Pro	Val	Leu	Glu	Lys	Leu	Lys	Ala	Ala	His	Ser	Tyr	Asn
				140					145					150
Pro	Lys	Glu	Phe	Glu	Trp	Asn	Leu	Lys	Ser	Gly	Arg	Val	Phe	Ile
				155					160					165
Ile	Lys	Ser	Tyr	Ser	Glu	Asp	Asp	Ile	His	Arg	Ser	Ile	Lys	Tyr
				170					175					180
Ser	Ile	Trp	Cys	Ser	Thr	Glu	His	Gly	Asn	Lys	Arg	Leu	Asp	Ser
				185					190					195
Ala	Phe	Arg	Cys	Met	Ser	Ser	Lys	Gly	Pro	Val	Tyr	Leu	Leu	Phe
				200					205					210
Ser	Val	Asn	Gly	Ser	Gly	His	Phe	Cys	Gly	Val	Ala	Glu	Met	Lys
				215					220					225
Ser	Pro	Val	Asp	Tyr	Gly	Thr	Ser	Ala	Gly	Val	Trp	Ser	Gln	Asp

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	230		235		240
Lys Trp Lys Gly	Lys Phe Asp Val Gln	Trp Ile Phe Val Lys	Asp		
	245		250		255
Val Pro Asn Asn	Gln Leu Arg His Ile	Arg Leu Glu Asn Asn	Asp		
	260		265		270
Asn Lys Pro Val	Thr Asn Ser Arg Asp	Thr Gln Glu Val Pro	Leu		
	275		280		285
Glu Lys Ala Lys	Gln Val Leu Lys Ile	Ile Ser Ser Tyr Lys	His		
	290		295		300
Thr Thr Ser Ile	Phe Asp Asp Phe Ala	His Tyr Glu Lys Arg	Gln		
	305		310		315
Arg Arg Arg Arg	Trp Cys Ala Arg Asn	Gly Arg Val Glu Thr	Asn		
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Asn Glu Gly Glu	Pro Val Ser Tyr Met	Phe			
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<210> 2

<211> 2028

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1573677CB1

<400> 2

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atgaggctcc gtggtctact gcaggggacc ctccgattcc atacctcacc acctacggac 240
agctcagtaa cggagaccat cattttatgc acgatgctgt ttttgggcag cctggggggc 300
tggggaacaa catctatcag cacagggttca attttttccc tgaaaaccct gcgtttctcag 360
catgggggac aagtgggtct caaggtcagc agaccagag ctcagcctct cccagcacag 420
ccccagctt tggctcaacc gcagtatcag agccctcagc agccacccca gaccgctgg 480
gttgccccac gcaacagaaa cgccggcgtt gggcagagcg gaggggctgg cagcgatagc 540
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gaaaaactga aggtctgtca cagctacaac ccgaaagagt ttgagtggaa tctgaaaagc 660
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caggaggtgc ccttagaaaa agccaagcaa gtgctgaaaa ttatcagttc ctacaagcac 1080
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taacgtttga ctttgaaaac agtttaaaac acgtgtgctt ggtcagctcc agtgtgtcgt 1260
cccggtgcggg ggttgagtgt tgcattcttg cctttcttgt cgttgatttt tgcccagatg 1320
gatctgcatt tatttgtact ttttctatgt attataatcc tgtagaagtc actaataaag 1380
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atttaccat ttgatttttc tgctagacag ataactttta atttttcaaa tttggcagac 1740
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<223> Incyte ID No: 1456688F1

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<222> 311, 425, 457, 513, 518, 522, 524, 527, 533, 535-538, 541, 544
<223> a, t, c, g, or other

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aattttttt cctgttgaat gggtaaaaac aaaacaaaac tttttttaga agatgaattt 180
gctgtcatgt tttgtggaat gagggaccgt tgagctcact accacctgga gtttgagttg 240
aagcatgaaa atgggtgcca tgcctgacgc tccagcgcct ggatctgcac gtgcccttgt 300
agaggatcct naccgtccta gagagcagac gctttctgaa aactacttgc tccaaaagac 360
cctctgagtt aacgtttcag ctgtatcatt agacttgtat ttagagcgtg tcacttcctc 420
tgaanctgtt actgcctgaa tggagtcctg gacgacnatt gggttttttc ctctaggaga 480
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nganaa 546

<210> 8
<211> 634
<212> DNA
<213> Homo sapiens

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<221> unsure
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<223> a, t, c, g, or other

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atgaggctcc gtggtctact gcaggggacc ctccgattcc atacctcacc acctacggac 240
agctcagtaa cggagaccat cattttatgc acgatgctgt ttttgggcag cctgggggcc 300
tggggaacaa catctatcag cacaggttca attttttccc tgaaccacct gcgttctcag 360
catgggggac aagtgggtct caaggtcagc agaccagag ctccgcgtat gggagcagct 420
acacctaccc cccgagctcc ctgggtggca cgggtggtga tgggcagcca gggctttcac 480
agcgacacc tcagcaaggn ccccgggat gaacagcctg gagcagggca tggttggcct 540
gaagattggg gacgtcagct gcctcngcng tcaagacgtg ggctctgtct cagcagcgtg 600
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<210> 9
<211> 598
<212> DNA
<213> Canis familiaris

<220>
<221> misc_feature
<223> Incyte ID No: 702758636H1 (Dog)

0987633-060001

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<213> Rattus norvegicus

<220>

<221> misc_feature

<223> Incyte ID No: 702482342T1(Rat)

<400> 11

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gtttgtgaca ggcttggtgt cgttattctc cagtctgatg tgccgcagtt gattattggg 360
cacatccttg acaaaaatcc acttcacatc aaacttcccc ttccacttgt cctgagacca 420
gaccccagca ctggtgccgt agtccacagg ggacttcatt tctgccaccc cacagaaatg 480
tccactccca ttgacactga agagcagata aacaggcccc ttgctgctca tggagcggaa 540
ggcgccatcc caggcgcttt gttgccatgt tccagtacta caccagatgg agtacttgat 600
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<210> 12

<211> 559

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: g12711367

<400> 12

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 20          25          30
Asp Asn Asp Phe Glu Pro Tyr Leu Thr Gly Gln Ser Asn Gln Ser
 35          40          45
Asn Ser Tyr Pro Ser Met Ser Asp Pro Tyr Leu Ser Ser Tyr Tyr
 50          55          60
Pro Pro Ser Ile Gly Phe Pro Tyr Ser Leu Asn Glu Ala Pro Trp
 65          70          75
Ser Thr Ala Gly Asp Pro Pro Ile Pro Tyr Leu Thr Thr Tyr Gly
 80          85          90
Gln Leu Ser Asn Gly Asp His His Phe Met His Asp Ala Val Phe
 95          100         105
Gly Gln Pro Gly Gly Leu Gly Asn Asn Ile Tyr Gln His Arg Phe
 110         115         120
Asn Phe Phe Pro Glu Asn Pro Ala Phe Ser Ala Trp Gly Thr Ser
 125         130         135
Gly Ser Gln Gly Gln Gln Thr Gln Ser Ser Ala Tyr Gly Ser Ser
 140         145         150
Tyr Thr Tyr Pro Pro Ser Ser Leu Gly Gly Thr Val Val Asp Gly
 155         160         165
Gln Pro Gly Phe His Ser Asp Thr Leu Ser Lys Ala Pro Gly Met
 170         175         180
Asn Ser Leu Glu Gln Gly Met Val Gly Leu Lys Ile Gly Asp Val
 185         190         195
Ser Ser Ser Ala Val Lys Thr Val Gly Ser Val Val Ser Ser Val
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09677633-060001

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	200		205		210
Ala Leu Thr Gly Val	Leu Ser Gly Asn	Gly Gly Thr Asn Val	Asn		
	215		220		225
Met Pro Val Ser Lys	Pro Thr Ser Trp	Ala Ala Ile Ala Ser	Lys		
	230		235		240
Pro Ala Lys Pro Gln	Pro Lys Met Lys	Thr Lys Ser Gly Pro	Val		
	245		250		255
Met Gly Gly Gly Leu	Pro Pro Pro Pro	Ile Lys His Asn Met	Asp		
	260		265		270
Ile Gly Thr Trp Asp	Asn Lys Gly Pro	Val Pro Lys Ala Pro	Val		
	275		280		285
Pro Gln Gln Ala Pro	Ser Pro Gln Ala	Ala Pro Gln Pro Gln	Gln		
	290		295		300
Val Ala Gln Pro Leu	Pro Ala Gln Pro	Pro Ala Leu Ala Gln	Pro		
	305		310		315
Gln Tyr Gln Ser Pro	Gln Gln Pro Pro	Gln Thr Arg Trp Val	Ala		
	320		325		330
Pro Arg Asn Arg Asn	Ala Ala Phe Gly	Gln Ser Gly Gly Ala	Gly		
	335		340		345
Ser Asp Ser Asn Ser	Pro Gly Asn Val	Gln Pro Asn Ser Ala	Pro		
	350		355		360
Ser Val Glu Ser His	Pro Val Leu Glu	Lys Leu Lys Ala Ala	His		
	365		370		375
Ser Tyr Asn Pro Lys	Glu Phe Glu Trp	Asn Leu Lys Ser Gly	Arg		
	380		385		390
Val Phe Ile Ile Lys	Ser Tyr Ser Glu	Asp Asp Ile His Arg	Ser		
	395		400		405
Ile Lys Tyr Ser Ile	Trp Cys Ser Thr	Glu His Gly Asn Lys	Arg		
	410		415		420
Leu Asp Ser Ala Phe	Arg Cys Met Ser	Ser Lys Gly Pro Val	Tyr		
	425		430		435
Leu Leu Phe Ser Val	Asn Gly Ser Gly	His Phe Cys Gly Val	Ala		
	440		445		450
Glu Met Lys Ser Pro	Val Asp Tyr Gly	Thr Ser Ala Gly Val	Trp		
	455		460		465
Ser Gln Asp Lys Trp	Lys Gly Lys Phe	Asp Val Gln Trp Ile	Phe		
	470		475		480
Val Lys Asp Val Pro	Asn Asn Gln Leu	Arg His Ile Arg Leu	Glu		
	485		490		495
Asn Asn Asp Asn Lys	Pro Val Thr Asn	Ser Arg Asp Thr Gln	Glu		
	500		505		510
Val Pro Leu Glu Lys	Ala Lys Gln Val	Leu Lys Ile Ile Ser	Ser		
	515		520		525
Tyr Lys His Thr Thr	Ser Ile Phe Asp	Asp Phe Ala His Tyr	Glu		
	530		535		540
Lys Arg Gln Glu Glu	Glu Glu Val Val	Arg Lys Glu Arg Gln	Ser		
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Arg Asn Lys Gln					

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 <212> PRT
 <213> Homo sapiens

<220>

PC-0040 US

<221> misc_feature

<223> Incyte ID No: g6449083

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				20					25					30
Asp	Asp	Asp	Phe	Glu	Pro	Tyr	Leu	Ser	Pro	Gln	Ala	Arg	Pro	Asn
				35					40					45
Asn	Ala	Tyr	Thr	Ala	Met	Ser	Asp	Ser	Tyr	Leu	Pro	Ser	Tyr	Tyr
				50					55					60
Ser	Pro	Ser	Ile	Gly	Phe	Ser	Tyr	Ser	Leu	Gly	Glu	Ala	Ala	Trp
				65					70					75
Ser	Thr	Gly	Gly	Asp	Thr	Ala	Met	Pro	Tyr	Leu	Thr	Ser	Tyr	Gly
				80					85					90
Gln	Leu	Ser	Asn	Gly	Glu	Pro	His	Phe	Leu	Pro	Asp	Ala	Met	Phe
				95					100					105
Gly	Gln	Pro	Gly	Ala	Leu	Gly	Ser	Thr	Pro	Phe	Leu	Gly	Gln	His
				110					115					120
Gly	Phe	Asn	Phe	Phe	Pro	Ser	Gly	Ile	Asp	Phe	Ser	Ala	Trp	Gly
				125					130					135
Asn	Asn	Ser	Ser	Gln	Gly	Gln	Ser	Thr	Gln	Ser	Ser	Gly	Tyr	Ser
				140					145					150
Ser	Asn	Tyr	Ala	Tyr	Ala	Pro	Ser	Ser	Leu	Gly	Gly	Ala	Met	Ile
				155					160					165
Asp	Gly	Gln	Ser	Ala	Phe	Ala	Asn	Glu	Thr	Leu	Asn	Lys	Ala	Pro
				170					175					180
Gly	Met	Asn	Thr	Ile	Asp	Gln	Gly	Met	Ala	Ala	Leu	Lys	Leu	Gly
				185					190					195
Ser	Thr	Glu	Val	Ala	Ser	Asn	Val	Pro	Lys	Val	Val	Gly	Ser	Ala
				200					205					210
Val	Gly	Ser	Gly	Ser	Ile	Thr	Ser	Asn	Ile	Val	Ala	Ser	Asn	Ser
				215					220					225
Leu	Pro	Pro	Ala	Thr	Ile	Ala	Pro	Pro	Lys	Pro	Ala	Ser	Trp	Ala
				230					235					240
Asp	Ile	Ala	Ser	Lys	Pro	Ala	Lys	Gln	Gln	Pro	Lys	Leu	Lys	Thr
				245					250					255
Lys	Asn	Gly	Ile	Ala	Gly	Ser	Ser	Leu	Pro	Pro	Pro	Pro	Ile	Lys
				260					265					270
His	Asn	Met	Asp	Ile	Gly	Thr	Trp	Asp	Asn	Lys	Gly	Pro	Val	Ala
				275					280					285
Lys	Ala	Pro	Ser	Gln	Ala	Leu	Val	Gln	Asn	Ile	Gly	Gln	Pro	Thr
				290					295					300
Gln	Gly	Ser	Pro	Gln	Pro	Val	Gly	Gln	Gln	Ala	Asn	Asn	Ser	Pro
				305					310					315
Pro	Val	Ala	Gln	Ala	Ser	Val	Gly	Gln	Gln	Thr	Gln	Pro	Leu	Pro
				320					325					330
Pro	Pro	Pro	Pro	Gln	Pro	Ala	Gln	Leu	Ser	Val	Gln	Gln	Gln	Ala
				335					340					345
Ala	Gln	Pro	Thr	Arg	Trp	Val	Ala	Pro	Arg	Asn	Arg	Gly	Ser	Gly
				350					355					360
Phe	Gly	His	Asn	Gly	Val	Asp	Gly	Asn	Gly	Val	Gly	Gln	Ser	Gln
				365					370					375
Ala	Gly	Ser	Gly	Ser	Thr	Pro	Ser	Glu	Pro	His	Pro	Val	Leu	Glu
				380					385					390

09877533-060801

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Lys	Leu	Arg	Ser	Ile	Asn	Asn	Tyr	Asn	Pro	Lys	Asp	Phe	Asp	Trp
				395					400					405
Asn	Leu	Lys	His	Gly	Arg	Val	Phe	Ile	Ile	Lys	Ser	Tyr	Ser	Glu
				410					415					420
Asp	Asp	Ile	His	Arg	Ser	Ile	Lys	Tyr	Asn	Ile	Trp	Cys	Ser	Thr
				425					430					435
Glu	His	Gly	Asn	Lys	Arg	Leu	Asp	Ala	Ala	Tyr	Arg	Ser	Met	Asn
				440					445					450
Gly	Lys	Gly	Pro	Val	Tyr	Leu	Leu	Phe	Ser	Val	Asn	Gly	Ser	Gly
				455					460					465
His	Phe	Cys	Gly	Val	Ala	Glu	Met	Lys	Ser	Ala	Val	Asp	Tyr	Asn
				470					475					480
Thr	Cys	Ala	Gly	Val	Trp	Ser	Gln	Asp	Lys	Trp	Lys	Gly	Arg	Phe
				485					490					495
Asp	Val	Arg	Trp	Ile	Phe	Val	Lys	Asp	Val	Pro	Asn	Ser	Gln	Leu
				500					505					510
Arg	His	Ile	Arg	Leu	Glu	Asn	Asn	Glu	Asn	Lys	Pro	Val	Thr	Asn
				515					520					525
Ser	Arg	Asp	Thr	Gln	Glu	Val	Pro	Leu	Glu	Lys	Ala	Lys	Gln	Val
				530					535					540
Leu	Lys	Ile	Ile	Ala	Ser	Tyr	Lys	His	Thr	Thr	Ser	Ile	Phe	Asp
				545					550					555
Asp	Phe	Ser	His	Tyr	Glu	Lys	Arg	Gln	Arg	Gly	Arg	Arg	Lys	Cys
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<210> 14

<211> 570

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: g5360085

<400> 14

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Asn	Lys	Val	Gln	Asn	Gly	Ser	Val	His	Gln	Lys	Asp	Gly	Leu	Asn
				20					25					30
Asp	Asp	Asp	Phe	Glu	Pro	Tyr	Leu	Ser	Pro	Gln	Ala	Arg	Pro	Asn
				35					40					45
Asn	Ala	Tyr	Thr	Ala	Met	Ser	Asp	Ser	Tyr	Leu	Pro	Ser	Tyr	Tyr
				50					55					60
Ser	Pro	Ser	Ile	Gly	Phe	Ser	Tyr	Ser	Leu	Gly	Glu	Ala	Ala	Trp
				65					70					75
Ser	Thr	Gly	Gly	Asp	Thr	Ala	Met	Pro	Tyr	Leu	Thr	Ser	Tyr	Gly
				80					85					90
Gln	Leu	Ser	Asn	Gly	Glu	Pro	His	Phe	Leu	Pro	Asp	Ala	Met	Phe
				95					100					105
Gly	Gln	Pro	Gly	Ala	Leu	Gly	Ser	Thr	Pro	Phe	Leu	Gly	Gln	His
				110					115					120
Gly	Phe	Asn	Phe	Phe	Pro	Ser	Gly	Ile	Asp	Phe	Ser	Ala	Trp	Gly
				125					130					135
Asn	Asn	Ser	Ser	Gln	Gly	Gln	Ser	Thr	Gln	Ser	Ser	Gly	Tyr	Ser
				140					145					150

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Ser	Asn	Tyr	Ala	Tyr	Ala	Pro	Ser	Ser	Leu	Gly	Gly	Ala	Met	Ile
				155					160					165
Asp	Gly	Gln	Ser	Ala	Phe	Ala	Asn	Glu	Thr	Leu	Asn	Lys	Ala	Pro
				170					175					180
Gly	Met	Asn	Thr	Ile	Asp	Gln	Gly	Met	Ala	Ala	Leu	Lys	Leu	Gly
				185					190					195
Ser	Thr	Glu	Val	Ala	Ser	Asn	Val	Pro	Lys	Val	Val	Gly	Ser	Ala
				200					205					210
Val	Gly	Ser	Gly	Ser	Ile	Thr	Ser	Asn	Ile	Val	Ala	Ser	Asn	Ser
				215					220					225
Leu	Pro	Pro	Ala	Thr	Ile	Ala	Pro	Pro	Lys	Pro	Ala	Ser	Trp	Ala
				230					235					240
Asp	Ile	Ala	Ser	Lys	Pro	Ala	Lys	Gln	Gln	Pro	Lys	Leu	Lys	Thr
				245					250					255
Lys	Asn	Gly	Ile	Ala	Gly	Ser	Ser	Leu	Pro	Pro	Pro	Pro	Ile	Lys
				260					265					270
His	Asn	Met	Asp	Ile	Gly	Thr	Trp	Asp	Asn	Lys	Gly	Pro	Val	Ala
				275					280					285
Lys	Ala	Pro	Ser	Gln	Ala	Leu	Val	Gln	Asn	Ile	Gly	Gln	Pro	Thr
				290					295					300
Gln	Gly	Ser	Pro	Gln	Pro	Val	Gly	Gln	Gln	Ala	Asn	Asn	Ser	Pro
				305					310					315
Pro	Val	Ala	Gln	Ala	Ser	Val	Gly	Gln	Gln	Thr	Gln	Pro	Leu	Pro
				320					325					330
Pro	Pro	Pro	Pro	Gln	Pro	Ala	Gln	Leu	Ser	Val	Gln	Gln	Gln	Ala
				335					340					345
Ala	Gln	Pro	Thr	Arg	Trp	Val	Ala	Pro	Arg	Asn	Arg	Gly	Ser	Gly
				350					355					360
Phe	Gly	His	Asn	Gly	Val	Asp	Gly	Asn	Gly	Val	Gly	Gln	Ser	Gln
				365					370					375
Ala	Gly	Ser	Gly	Ser	Thr	Pro	Ser	Glu	Pro	His	Pro	Val	Leu	Glu
				380					385					390
Lys	Leu	Arg	Ser	Ile	Asn	Asn	Tyr	Asn	Pro	Lys	Asp	Phe	Asp	Trp
				395					400					405
Asn	Leu	Lys	His	Gly	Arg	Val	Phe	Ile	Ile	Lys	Ser	Tyr	Ser	Glu
				410					415					420
Asp	Asp	Ile	His	Arg	Ser	Ile	Lys	Tyr	Asn	Ile	Trp	Cys	Ser	Thr
				425					430					435
Glu	His	Gly	Asn	Lys	Arg	Leu	Asp	Ala	Ala	Tyr	Arg	Ser	Met	Asn
				440					445					450
Gly	Lys	Gly	Pro	Val	Tyr	Leu	Leu	Phe	Ser	Val	Asn	Gly	Ser	Gly
				455					460					465
His	Phe	Cys	Gly	Val	Ala	Glu	Met	Lys	Ser	Ala	Val	Asp	Tyr	Asn
				470					475					480
Thr	Cys	Ala	Gly	Val	Trp	Ser	Gln	Asp	Lys	Trp	Lys	Gly	Arg	Phe
				485					490					495
Asp	Val	Arg	Trp	Ile	Phe	Val	Lys	Asp	Val	Pro	Asn	Ser	Gln	Leu
				500					505					510
Arg	His	Ile	Arg	Leu	Glu	Asn	Asn	Glu	Asn	Lys	Pro	Val	Thr	Asn
				515					520					525
Ser	Arg	Asp	Thr	Gln	Glu	Val	Pro	Leu	Glu	Lys	Ala	Lys	Gln	Val
				530					535					540
Leu	Lys	Ile	Ile	Ala	Ser	Tyr	Lys	His	Thr	Thr	Ser	Ile	Phe	Asp
				545					550					555
Asp	Phe	Ser	His	Tyr	Glu	Lys	Arg	Gln	Arg	Gly	Arg	Arg	Lys	Cys
				560					565					570